



Treatise concerning the right vse and ordering of Bees:

Newlie made and set forth, according to the
*Authors owne experience: (Which by any
heretofore hath not been done)*

By *Edmund Southerne* Gent.

Better late then neuer.



Imprinted at London by *Thomas Orwin* for *Thomas Woodcocke*,
dwelling in *Paules Churchyard* at the signe of
the blacke Beare. 1593.

THE JOURNAL OF THE

AMERICAN MEDICAL ASSOCIATION

FOR THE YEAR 1900

CHICAGO, ILL., 1901

PUBLISHED BY THE ASSOCIATION

AT THE OFFICE OF THE PUBLISHER

535 N. Dearborn St., Chicago, Ill.

Entered as Second-Class Matter, May 1, 1896

Postage paid at Chicago, Ill., May 1, 1896

Acceptance for mailing at special rate of postage provided for in Act of October 3, 1917

Authorized by Act of October 3, 1917



To the right Worshipfull Mistres
*Margaret Astley, wife to John Astley Esquier,
Master and Treasurer of her Maesties Jewels
and Plate, and Gentleman of her Highnesse priuie
Chamber, all health and prosperitie, with
eternall felicitie.*



Hen first I began (right VVor-
shipfull) to be resolved at the
intreatie of some of my very
good friends, (but especiallie
for the benefite of my Coun-
trei) to publish this mine own
experience, touching the right vse and ordering
of Bees, I had no doubt of your fauourable cur-
tesie, in vouchsafing to be the Patronesse of these
my simple labours, in respect that none heretofore
hath done the like. Though I doe not denie but
long agoe many wise men haue very learnedly
written of the nature of Bees: and Virgil in his
Bucholicks hath giuen as reasonable directi-
ons, as euer any before him or since, and yet nei-
ther he nor they, no more then they did imagine
by naturall reason, as within these foureteene

The Epistle Dedicatorie.

yeares I haue fully prooued. But I am assured, there will be more fault-finders then correctors, & most of such which herein haue no iudgement at all, their stomackes for the queisines not able to digest but Carpes, it is like that I shal not escape free from the frumps of Momus. Therefore my humble suite is, for that you haue had some triall of my skill, as occasion shall serue, that you will, in my behalse, against such barking curs, remember, (this saying of Chaucer) Let them speake what they will, but trust well this: a wicked tongue will euer say amisse. I was the rather imboldened to goe forward with this profitable labour; because I see that daily euery trifle wanteth not either an honourable or worshipfull protector, yet when I remember the earnest desire, which (almost) euery Patron hath with philed phrases and glorious gloses to haue their names extolled, and their vertues eternized, (though it be but in an argument of follie) and yet peradventure neuer learned one lesson to deserue it, haue neuerthelesse some fauourites fit for their egregious surquidrie, I was very loath, both in respect of mine ignorāce, and meannes of the matter, (any wayes) to bee troublesome to
such,

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such, which in their owne conceits are most wor-
thie of all duetie, and onely giue credite to those,
who cā best, or rather worst, please their humors
by flatterie. But to leaue them (and their demie
gods) to the censuring of the wiser sort, who will
not iudge by the eare, but according to equitie,
(onely) those in mine opinion are worthie grea-
test praise and commendations, that to the ad-
uancement of trueth and benefite of their coun-
trei, vouchsafe the patronage of the meanest dis-
course, to the furtherance whereof I dare pre-
sume of your selfe (as of any) both for your zeale
towards God, and faithfull regard to the welfare
of your neighbours. And if you deigne to ac-
cept this my poore myte, which I offer you
with an vnfaigned good will, I haue
as much as I desire, and more
then I can deserue.

Your Worships most bound and
faithfull welwiller. Ed. Southerne.

To the Reader.



I may be (right courteous Reader) thou wilt vpon the first view of this Treatise, thinke me neither to be idle, nor yet wel occupied, in giuing directions for the ordering of those creatures, who in their owne kind by nature haue amongst themselves as firme a gouernment, as most Common-weales: yet let me intreate thee not to be ouer rash, but consider that what creatures soeuer the Lord hath made for the vse of man, and especially those of most profite, although by nature they are decked with the chiefest ornaments for their defence, yet for want of guiding by man, how soone doe they goe to wracke and decay? But chiefly these most profitable creatures, mentioned in this Treatise, are for want of due experience greatly neglected. For I doe assure my selfe, that very fewe within this realme, especially of such as best may haue any regard at all of Bees, and yet how farre English honey palleth that of other countries, who knoweth not. But such nice mouthes which are good for nothing but to tast Lampe oyle, crie, Oh honey, fie its fulsome: Sugar, I marie, thats the fellow: and why forsooth? because far fetcht and deare bought is good for Ladies. No, no, England hath the blessings of God, but the ingratitude of the people is so abominable, that vnlesse speedie repentance, it is to be feared such an account one day wilbe required for so manifold abuses, that the couetousest Miser of all shall not pinch at the reckonings. Some againe forsooth are afraid, that of the least droppe of honey they shall surfet: whereas

not

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not any one feeleth any surfet of a whole sea of sinnes: but to such I answere, that neuer any that eate honey moderatly, did surfet, and those that will take paines to eate bread with honey, (although they did eate no other foode) should neuer surfet, vnlesse it were of too long life. I must confesse that to some complexions honey is contrarie, both for sight and taste: shall it therefore be accompted loathsome? Why then, Flesh, fish, Butter, Cheese, Eggs, Milke, Geese, Duckes, yea and to some the very sight of a Rose is abominable: so that these might be reiected, if for one particular mislike they should generally be forsaken. But that honey is as necessarie in euery respect as Sugar, both Chirur-gions, Apothecaries and Phisitions knowe (but too well) and for the vse of Waxe, how pleasant it is both for lights and medicines, there is none can denye. But thou wilt say (I marie) I could like well to haue Honey and Waxe, but I like not the stinging of Bees, how shall we doe for that matter? Wilt thou know. First there is no commoditie, in regard of worldlie wealth, but hath some discommoditie. The Marchant before he obtaine his desire, doth aduenture life and goods: and it is reason the Cat should wet her feete if she will eate any fish. Well, (say you) then of necessitie we must be stung with the Bees before we shall haue either Waxe or Honey. I say no: for if thou vse them according to the directions hereafter mentioned, thou needest not feare stinging: as for the profite that may arise yearely, being both lawfull and honest by Bees, it is more then by any other kind of chaffaire within the realme of England: for if you lay out ten pence for two hives about the beginning of Iune, & put therein two swarmes, they can be no lesse worth

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worth then ten shillings, and your hiues againe before Bartholomewtide following: then iudge what gaines after that rate there would arise, if a man had but xl. stocks (or stalles) as some tearme the: for if you haue xl. stalles in the beginning of the Spring, there is no doubt their increase wil be xl. more before Bartholomewtide following, which is in al lxxx. and then you may sell xl. and keepe xl. for increase, which xl. so sold will yeeld no lesse then xl. Crownes, with your hiues againe. And besides (as hereafter shall be shewed) you may suffer some of the to swarme twise, & then the later swarme you may kil for your own store (at Bartholomewtide when you sell your other old stocks,) & that honie & waxe wil be the better, because it is so new gathered. But now thou wilt say, it is not good to buy or sell Bees, but rather to exchange them for Wheate, otherwise they will not prosper. Indeed I thinke superstition hath got such deepe root among some, that neither my perswasion, nor none els (vnles it be *Capistrum*) are strong enough to pull them vp, and for such I leaue to themselves: but for thee I doe verily perswade my selfe, that I need not be tedious in vsing long circumstances, to induce thee to thinke otherwise, but that it is as lawfull with money to make any honest commoditie, as by other meanes whatsoeuer. Thus not doubting but thou wilt (if thou finde any error in the penning of this treatise) be content with thine owne insight, and charitable censure of my faithfull meaning, I wish thee all the good blessings that may.

Thine vnfaigned friend, *Edmund Southerne.*



A Treatise concerning the right vse
and ordering of Bees, neuer heretofore
knowne, newly set forth accor-
ding to the Authors owne experience.

By Edmond Southerne 1593.

The fittest ground for Bees;



Some warme plot, where there
is least shadow betwene the and
the South, Southwest & West:
but if there be any betwene the
East, Northeast and North, it is
the better: but this shadowe that
I meane is of trees, as Apples,
Plums, Cherries, Oake, Elm, or
any other tree, except Elder or

Elwe: for of these two later trees although they doe ga-
ther, yet will they not settle themselves in swarming
time: neuerthelesse, if you haue no such ground enviro-
ned with trees as aforesayd, yet in such ground as you
haue, you may set Bees without danger, placing them as
hereafter is expessed.

To choose your Hiuies.

The best time is to haue your hiuies made about Christ-
mas, for then you may haue them better cheape, and
straw is best in season, and the byers that they bind them

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withhall are then strongest, and will indure the longer: but in any wise let not your Hives be above fiftene or sixteene rolles at the most, both of great and small: but if your Hives be made of twiggess, as in some Countries they vse, so they containe not about halfe a bushel a peere, it is enough.

To proue that great Hives cannot be profitable.

You are to note that when the Hive is bigge, it will aske long time and great labour for the Bees to fill, so that the first yeare they cannot haue time enough to doe it as they may the little Hives: and the next yeare when they should bræde Bees, they are busied about filling vp their Hives: for untill the Hives be full of Combes, they will not swarme, and then the Spring being farre spent before they goe to bræding, the swarmes must needes come late, which doth both endaunger the swarme, and also the olde stocke, for that the olde stocke will haue no pleasure to gather honey till the swarme be gone forth, which being late, the freshest flowers must needes decay before the Bees begin to worke, whereof proceedeth many times such death of Bees.

The manner how to dresse Hives before you put in Bees.

First after you haue bought your Hive, you must with a little knife proyne and cut away all the little superfluous tickling strawes within side of the Hive, and let it be as smooth as is possible: for if those strawes should bee let alone, when the Bees are new put into the Hive, they would scarce like of it, for that they cannot abide such strawes, no more then haire or any other ragged thing: or if by chaunce they doe carrie in such a Hive undressed, they

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they will of themselves bee so long in their manner for
scratching and biting away such paltrie, that they might
haue filled halfe the Hieue with Mace and Honey in that
space, if it were done for them. When you haue so trim-
med your Hieue, then take Shallowe, Willow, or Hasell
stickes, which being cleft in the middle and cleane shauen,
you may put fire parcels into a Hieue, that is to say, two a
crosse foure fingers breadth within side, and the other
foure parcels from the top to the mouth, being sticked
fast betwene the squares of the crosse stickes, is the best
way you can spray your Hieue, both for ease for the Bees,
and also for staying the Combes within side: and then,
Fennell, Dake, Clove, or Ashen leaues being dipped in
faire water with a little honey, besprinkle the Hieue, or if
you want honey, a little milke, if you haue no milke, faire
water will serue for a shift, and when you haue so done
put in your Bees, and they will carrie: but if you haue no
new Hieues readie, then you may take an old Hieue and
use that as aforesaid. But if your Bees be so forward that
they will not carrie in any Hieue, then take your Hieue
whether it be old or new, and pull out the stickes, and put
therein two handfuls of Barley or Pease, but Mault is
the best if you haue it, and let a Hogge, a Pigge or a Sow
eate it, turning the Hieue with your hands as he eateth,
that the froth which he maketh in eating may remaine in
the Hieue, then wipe the Hieue againe lightly with an old
woollen or linnen cloath, then thrust in your stickes as a-
foresayd, and so the Bees being put in they will abide
without further trouble: but this is specially to be done
to an old Hieue rather then a newe, and you may doe it a
day or two before you occupie it, and it will serue well
enough.

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To place your Bees in your Garden, or
any other ground.

[If you haue no such ground, as before I spake of, then the best you can spare you may set them in, where they may haue the Sunne the longest part of the day, if it be possible, from seuen of the clocke in the morning till foure in the afternoone, if not, lesse while will not greatly hurt; but be sure when you place them, let them stand within two foote of the ground, whereby the winde shal not haue so much power ouer them as otherwise it would, and let the stone or boord whereon they stand, be at the least two handfuls broader then the Hieue, for that the Bees may haue roome enough to light vpon when they come home laden, especially in a windy day: and alwaies keepe the ground within a yard compasse of your Hieues so bare as you can; for if there should grasse or wædes grow about the Hieues, it would trouble the Bees passage to and fro: and besides, if any should be beaten downe with the wind, it would hinder their rising againe. Further, you must be sure to stop them by round with sand or clay, and Cow dung tempered together, leauing directly towards the South a hole for their passage in and out, but in any wise let the Hieue stand so close to the stone or boord as you can, so that the hole may be very narrow, and so narrow as is possible, the Bees hauing easie entrance: but of the order for stopping them shall be spoken hereafter: yet this I must put you in minde of, that by your owne reason if the hole should be wide, and the Hieue stand too high from the boord or stone, either Mice, Snayles, or some other vermin might get in, and so destroy the Bees: but although the hole must be narrow, yet it may be of a reasonable length, according as you thinke best, vnlesse it be at some speciall times hereafter expessed. Now, for that I aduise you to turne the hole towards the South, the reason is, for that the

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the Southwind neuer bloweth so cold as y other winds, and therefore is more kinder for them: and for that the Summe being hottest in the South, it is a great helpe to make them swarme the sooner. Also you are to note, that in a peece of ground being not past a quarter of an acre, you may not place about fortie stockes, with their increase for one Sommer at the most, and those stockes to be set at the least three fote asunder, for feare of infection by standing too nigh together. And besides, as many times it happeneth, (by occasion of weather) if a swarme should rise and goe home againe, and so stay till weather be fairer, the manner of their going home is so thicke, that if the stockes should stand nigh one another, it would be very dangerous, because then one stall or stocke would fight with another, which in the end would be hurtfull to all the whole companie: and for infecting each other, you may assuredly be perswaded, for if in Sommer evenings you walke amongst them, you shall smell a very strong savour issuing out of the Hives, which although every Hive in himselfe doe not dislike, yet one of another they utterly abhorre, according to the old grosse proverbe: Every mans owne filth is sweete. And whereas I have sayd before that you may place fortie stockes (with their increase for one Sommer) in a quarter of an acre of ground, my meaning is, that if you have fortie stockes standing in such a peece of ground about the beginning of Aprill, then you may be sure before Midsummer to have of those fortie, fortie more, all which you may place in such a peece together: but the at Bartholomewtide you must sell fortie of them, and so leaue but fortie, or els before the next Spring to remoue all out of that peece but fortie, and set them in some other place: for if you should leaue fourescore in such a little peece of ground together, it would be very troublesome to you in the swarming time. Further, if your dwelling be nigh any River which is broade, and that most of the fode which Bees doe gather, lieth ouer that River,

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there Bees will scarce prosper, vnlesse you can place them on the Southside of the Riuer, for that Bees will seldome or neuer flye Northward from their houses to seeke their foode: and although you doe place them on the Southside of the Riuer, if it be such a Riuer that maketh any noyse in the running, your Bees will not prosper, because they cannot abide such noyse, and besides, water is a great enemy to Bees: for if by chaunce by the winde they should be blowne downe into any water, they cannot rise again, vnlesse they happen to take hold of a leafe, sticke, or some other thing that swimmeth aboue the water to ease them. Further, you must be sure to place them so farre as you can from any noyse, especially of bels, he wing of timber, or other great noyses whatsoeuer, for that they will in no wise prosper but decay, especially in winter time where there is such noyse: for you are to note, that in winter time sleepe doth Bees as much good as their meate, because in Sommer they neuer sleepe, and so long as they sleepe they desire not to eate, which they would, being alwayes awake, which maketh them hungrie, and they would not awake once in thre or foure daies, were it not for noyse: and I haue proued that one faire sunshine day in winter doth Bees as much harme, and maketh them consume more of their foode then ten foule daies, because on the faire day they doe awake and play abroad, and so become hungrie, whereas otherwise they would sleepe, and if they doe awake on a foule day, yet they would not eate a quarter so much as on a faire day, because they cannot goe abroad.

The maner of the Bees breeding.

Most of the ancient writers hold opinion, that they lay egges, and sit vpon them fīue and fortie daies before they become Bees: but how farre therein they are deceiued common experience teacheth: for that after an old stocke hath once swarmed, within nine daies he will swarme

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swarme againe. Tush (say you) those that come after may be a remainder of the first broode, and being not full sledge come after. Wilt thou knowe another reason? About Whitsonside I haue had a swarme, the which I haue put into an emptie Hie, wherein hath been neither honey nor ware, and that swarme within fiftene daies hath brought another, (how saiest thou to this?) this is a common thing, though not necessarie for profite, yet sufficient to proue that they sit not fine and fortie daies: but the truth is, at the beginning of Aprill when all the holes be emptie, and that there is some foode to be gathered abroad, they fall to strengthening of their Combes, and to mending of such places as are amisse, and to cleansing of the filth from amongst their Combes, all which they will haue done before mid-May, and then they begin to blow, as a Flye or Waspe doth, in one hole, sauing that Flyes and Waspes gather no honey, for the Flyes yong ones are nourished by the flesh wherein they are blowne, and the Waspes by the earth wherein they are bred: but the Bees (as I say) after they haue blowne in one hole, they fill the next with honey, and so go thorough the Combes one hole full of honey, the other of a yong Bee, and of that honey the yong Bees are nourished till they come to full perfection, which is in fiftene daies at the vttermost.

That it is not good to kill
the Drones.

MAny men holde that it is very necessarie to destroy them, & thereto deuise sundry instruments for the accomplishing of so great a folly, but aboue all, one M. Hill of London in his booke intituled, The Gardners Labyrinth, sheweth the (madder) manner (I would say) how it should be done. Saith he, take one of y^e Drones & pul off his legs, and one of his wings, & put him into the Hie againe, & as soone as the Bees perceiue y^e, presently they will fall vpon
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the rest and so kill them all. But by your leaue (good Master Hill) your aduice will proue true, when for the death of one theefe all other will cease stealing: mary this I thinke, that if you catch euery Drone and serue him so, it is likely they will sone dye: for after such a manner Skogin taught the old wines to kill fleas. But in truth whosoever doth vse or practise the destruction of Drones, shall neuer haue profite by Bees: for although the Drones labour not abroade, yet that which the other Bees bring home, they doe both helpe to work into Combes, and also to vnlode the Bees of their burthens, so that their work within is as necessarie as the others abroad: mary I denie not but they be great eaters and deuourers, but in requitall of that they doe wonderfull good seruice: for in winter they lying amongst the other Bees keepe them very warme, and also as occasion serueth, doe scoure and cleanse the Combes aboue, so that the filth falleth down to the boord, where, unlesse it be taken away, as hereafter shall be shewed, it will doe great harme: and when there are too many Drones in a Hieue, and that the Bees perceiue (as by nature they know) that they are hindered by them, then the Bees of themselves will kill so many as they thinke good, so that I haue scene at least a pint lye dead vnder a Hieue at once: and this they haue alwaies done, and so will euer continue, as occasion serueth, without Master Hills aduice, as I haue often scene my selfe, and shewed it to diuers, but especially to this honorable and well minded Gentlewoman, vpon whose rare vertues and singular curtesie I haue presumed for the Patronesse of this Treatise, without giuing any notice to her of it, vntill it was past the presse.

To vse your Bees in swarming time.

First when you perceiue a swarme begin to rise, it were not amisse to goe and hold by the stocke from whence they

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they come, whereby the Bees will quickly come forth, and then you may be sure they will not goe farre but settle presently, (alwaies prouided that it is the greatest negligence not to haue a Hieue readie before you must needes occupie it). But if for feare of stinging thou wilt not hold vp the stocke, then thou maiest let them come forth at leisure: but I do assure thee, thy life for mine, that at such a time they will not sting, because they haue more minde to hearken after their fellows then otherwise, for my part, I haue stood and held vp the olde stockes when the swarmes haue been comming forth, and yet was neuer stung, although they haue lien as thicke vpon my bare hands and face as is possible, but this I say thou maiest chuse to doe. When the swarme is vp it is not good to ring them, as some doe, nay it is a common thing where there is no experience, to keepe a stirre and lay on either with a Bason, Kettle, or Fryng pan, taking (as the common prouerbe is) great paines, and haue little thanks: for by such meanes they make the Bees angrie, and goe further to settle, then otherwise they would, or els creepe close to the bodie of a tree, which must needes be troublesome, for that they cannot abide such noyse. Some againe vse to cast water vp amongst them, which on the other side is as bad: for that as I haue sayd, water is an enemy to Bees, and is one chief cause that maketh so many Bees flye into hollow trees, and so are lost by those that knowe not how to get them out. The best is, when the swarme is come forth, if it be not very windie, to cast some dust vp amongst them, and a little now and then to whistle is as much as needeth: or if they begin to flye very high, which is a token of going farre, which will be very seldom, it is but throwing a little hogs dung, or an old hat or a cap amongst them, and they will come dolue presently and settle, and by this meanes they will not be angrie, so that thou shalt not be stung at all, vlesse thou strike at them with thy hands, and goe about them boy-
sterously,

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sterously, but goe orderly to them, and thou shalt finde them as gentle as sheepe, with much more profite, for thy sheepe aske attendance all Sommer, and prouision of fodder against Winter, whereas thy Bees aske but one moneths attendance at all, which is in Sommer, and yet no prouision against Winter. And besides, there is neuer losse in Bees as there is in sheepe, yet if by chaunce thou shouldst be stung at one time or other, it would hurt neither life nor limme I warrant thee: and for to stint the paine which is but momentarie, take but a Sage leafe, Cabbage leafe, or peece of a Docke leafe, and rubbe it, it will sone cease: for I assure thee, vnlesse thou greatly bryge it, a Bee will not sting, for that by nature she knoweth that it is hurtfull to none but her selfe: for by stinging she loseth both her sting and entrailes, whereof within two daies at the most she dyeth: yet some will say they after ward liue & become Drones: but that I know to be contrarie, for the Drone is a lustie great strong Bee, farre bigger then another Bee, and lieth al day labouring in the Hie, vnlesse it be an houre or two in the afternoone that he commeth forth to play, and there is not so few as three or foure hundred Drones in a Hie, and indeed they haue no stings, which is proper to them in breeding, for of Drones, Drones doe breed, and of other Bees accordingly, and this I am assured of. But that another Bee should become a Drone after she hath lost her entrailes, is as vnlikely as if one should draw a Dwarffes guts out of his bellie, he would after ward become a Giant: for many times I haue found Bees dead before the Hies, and they haue had no stings nor guts. But if thou perceiue two swarmes rising together, then thou must of necessitie, if thou looke to haue any profite of them, go and hold vp one of the stocks, that the Bees may come out quickly, & stick a fewe bowes afore the other, and hang a white cloath or sheete vpon the bowes to hinder their coming out, & so sone as halfe the first are settled, pop them into a Hie, and

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and carry them into a corner a good way off, and though it were halfe a mile their fellowes would finde them: but a quaytes cast off is enough, and then you may let the other haue their full libertie, although it be seldome that two swarmes doe arise iust together: yet if they doe, without good heed, they will settle together, and then they will not be so good as one swarme: for though they doe farrie together & labour, yet it is in such contépt one of another, that they wil neuer thriue nor increase, & yet it is vnpossible to part them, as hereafter shalbe shewed. Whereas I haue said befoze that Drones come not abroad, vnlesse it be an houre or two in the afternone, that I meane of the ordinarie rule of the Drones themselves. But when there is a swarme rising, whether it be in the forenone or afternone, there wil diuers Drones go with them, & I verely thinke that the swarmes are rather led by those Drones, then one particular master Bee, as some fancy: for if there should be a master Bee to go forth with the swarme, who shall rule the olde stocke? When thou wilt say, there is a master Bee for the stocke, & another for the swarme, then it is not likely there is a king: for that loue & principalitie like no equalitie, therefore not two kings: but I say, nor king nor master, but certaine leaders, & so thou must say, or els deceiue thy self, or els wilfully think there be many masters in one hieue, for I haue seene foure swarmes come out of one hieue: so y by this I think thou wilt say with me, there be many leaders, & no one master. For if thou driue sheepe, oren, swine, or any other cattell, some must needs go befoze & leade, or els all stand still, & yet amongst them thou allowest no master but the owners, neither willingly wouldest thou haue the skrine for mastership: no more is it amongst Bees, for where the first stay, the last will stay: but for that I think the Bees to be led by y Drones, is, because the Drones are strong & lustie, and haue great wings, and are swifter then the Bees, and keepe greater noyle, and therefore are best able to goe forniost, and the weaker and slowest to followe after.

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That two swarmes will not
be parted.

This sometime (in my fathers daies) through my negligence I haue proued, and haue been cudgelled afterward for my labour: although I knowe some that will face it out with oathes that they will easily be parted: but how vntruely they speake, I desire no better witnesses then their owne conscience. I remember a place in Worcester shire within the Vale of Euesham, called Honeyborne, where dwelt an olde Wickar which tooke great pleasure in Bees, and they triple requited his curtesie at his owne commaund: on a time there came to him two of his neighbours with cap in hand and a low curtisie, desiring master Wickar to giue each of them a swarme of Bees: he seeing himselfe so gently intreated, graunted their requests, and promised very shortly to performe it: within a weeke after it fortuned that the Wickar had two swarmes rose and settled together, he with his skill parted them, and put them into two Hives, and in the evening sent for the two men his neighbours, who dwelt a mile asunder, and gaue them their swarmes: on the next morning about eight a clock, one of the poore mens daughters going into the garden to see their new Bees, perceiuing them very busie about the Hive, ran in and told her father their new Bees were a swarming: with that the good man coming to looke, found his Bees readie to bid him farewell, and so they did, he followed them, and they brought him to the other mans house and into the garden, where they all went into those Bees from whence they were parted the day before: vpon this the two poore men fell out, knowing not the cause of the matter. Quoth one, what a spitefull malicious knaue art thou to bring thy Bees to kill mine, because thou mightest not haue al. Pay (quoth the other) folkes say thy wife is a Witch, and so I am

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am sure she is, for she hath bewitched my Bees to thine, because thou wouldest haue all. Then Master Clickar he was made acquainted with their brawles, he knowing wherof the matter proceeded, gaue him that lost his Bees another swarme, and so ended the matter between them. Thus you see, though they were parted for one whole night, and were carried a mile asunder, yet how they came together: therfore at such a time of necessitie, who would not be glad to preuent such an inconuenience, which can be done none other wise then as befoze I haue shewed.

That it is not good to haue more then one
swarme of a Hiue.

Some are so couetous, that they thinke themselues very happie, if they may haue foure or fise swarmes in a yeare out of one Hiue, I would know what Esops dogge got by his couetousnesse, looke in his Fables and there you shall finde: for that I am sure there was neuer increase of Bees, where there was such desire of their destruction. My reason is this, when you haue had one swarme, that is naturall, and then the old Bees goe to breeding againe, but not in such quantitie as befoze, as you may daily perceiue by those after swarmes or castlings: for in truth the old Bees doe onely breed those after broodes for to helpe them, because that yong Bees are more fresh and lustie to labour, and through want of helping the old stocke, so soone as the yong Bees are able to flie abroad, and feeling the aire to be more pleasant then their old breeders, like brain sicke youths runne out headlong to their owne destruction, and so force the old Bees to fall a breeding againe, and they likewise for want of helpe by man to the old stocke, flie out as the other befoze did, and by this meanes they are sure themselues neuer to be able to gather honey to finde them halfe a winter, and the old stockes they neuer haue pleasure in gathering, so

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long as they are forced to bræde, & when they haue done
bræding, and would gather, the yere wil be so farre spent,
that most of the freshest flowers will be faded, whereby
they are endangered. And if some of the olde stockes be
great labourers, and through their labour get enough to
finde themselves, yet towards Bartholomewtide when
the weather beginneth to wære cold, because you suffered
them to swarme so often, there will be but a fewe Bées
left, so that they cannot keepe that honey in a good tempe-
rature which befoze they had gathered: for if there be not
Bées enough to keepe the honey within the Hine warme,
when the weather, through the time of the yere, begin-
neth to coole the honey within the Combes, the honey
wareth hard, and then presently the Bées forsake it, for
they had rather dye then tarrie with it: whereof it com-
meth, that many times you shall finde (as I haue often
seene amongst such ignorant people) stockes full of wære
and honey, and not a Bée within it, but by reason of their
fewnes haue dispersed themselves, and no question dyed.
But for such stockes as you purpose to kill at Bartholo-
mewtide, you may the Sommer befoze let them swarme
twise, and so take them and their after-swarmes, & onely
keepe the first swarme for increase. But if you desire in-
crease of Bées, then I assure you one swarme of a stocke
is enough: and if you thinke after your olde stocke hath
once swarmed that he will swarme againe, you may with
thre bricke underlay the Hine, laying the bricke vpon
the boord or stone whereon the stocke standeth, and lift vp
the stocke and set it vpon the bricke, laying the bricke
round one a pretty way off another, like the feet of a triuot
or brandyzen, and so let the Hine stand till it be towards
Bartholomewtide, at which time you may set it downe
againe, and take away the bricke and stop it vp, as here-
after is expressed, and so long as those bricke lye there, the
Bées will not swarme, but labour faster then they did be-
foze: but this is to be done to such stockes as you are de-
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fitous to keep for increase, but for those which you meane to kill, you may let them swarme once or twice, as is before shewed.

That it is not good to driue Bees.

The common vse of driving Bees, is about Midsummer, but how they benefite that vse it, is easie to be known: for when they haue driuen them, they shall not find much honey in the Combes, for that most of the holes then will be full of young Bees like maggets, and then the putting out of the Bees from their houses, which are readie furnished, and to driue them into an emptie Hiue is such a discouragement to them, that although they doe begin to labour afterward, yet will they neuer thrive, neither yet could I euer heare of any that liued one yeare after they were driuen, nor will they gather a quarter of that honey into an emptie Hiue, as they would haue done into their owne, if they had been let alone: the reason is, because then they are forced to gather Ware and ane to worke it, which before in their owne was readie done. And also by naturall reason you may consider, that what man or woman soeuer should be turned out of their lands, goods and houses, the which before they had truely gotten, & should be forced to labour againe, they would rather become desperate: and besides, some Bees are so forward that they will not labour, but fight with their fellowes, and where they can ouercome, robbe & spoyle to their owne destruction, & as many as they shall so robbe and fight withall.

That it is not good to feed Bees.

This also is a common thing, and the onely hurt that one can doe to their Bees: for I assure you, you can deuise no losse in Bees but by feeding them, for thereby you spend your honey, time, lose your labour, and

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in the end destroy your Bees. My reason is this. First naturally you knowe, that what man or woman taking no paines, and hauing all things brought to them, if in the end they should haue nothing but what they got by labour, it would soone end their daies. Next, the honey you giue them is not kind, by reason of the hardnesse and your handling of it, which when they shall come to gather fresh, will make them scoure and be sicke, which is the destruction of many of them. Further, when you giue ouer feeding of them, they will labour abroad so long as there is any thing to be had, but yet they will lay by nothing in store against winter: for when they can get nothing abroad, they will like to robbe and spoyle others, and in the end they wil vtterly pine away: so that I neuer knew any that fed Bees, but before one yeare came to an ende the Bees dyed, and if they had not fed them they could haue but dyed. Neuerthelesse, if thou wilt but follow my directions hereafter expresse, thou shalt neuer neede to feede thy Bees, and thou shalt be sure they will not dye for want of foode.

To make your Bees strong
and lustie.

ABout the latter ende of March, if you perceiue your Bees to bee faint, and that they goe but slowly to and fro, then buy a groate's worth of Olibanum, which you shall haue at the Apothecaries, of the which you may take a little (being brused in a mortar) and cast it on a Chafing-dish of coales, and hold that stocke which is faint ouer it, that the smoake of the Olibanum may ascend by into the Combes amongst the Bees, and if you can get any dried Coludung, you may lay a little vpon the Chafingdish of coales with the Olibanum, and so the smoake of that, with the Olibanum together, will be somewhat the better: and this you may doe to so many of your stockes as you think good,

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good, and it will make them endure the sharpnes of the weather much better, and then set them downe againe in their places and let them stand. One groatesworth of Olibanum will serue foz tie stockes, if need be.

The signe to know when thy Bees
will swarme.

The surest signe that euer I could perceiue foz the first swarmes, was, in the eueninges I would goe and lay mine eare to the mouthes of the old stockes, and hearken which kept most noyse, and then after ward hearken againe, and that stocke which left off from keeping such a noyse at the mouth, and made most noyse aboue in the Hieue, would bee sure the next day to swarme, if the weather were any thing faire. But foz your after-swarmes or castlings, there is a generall rule to knowe when they will swarme: foz in Sommer eueninges, if you lay your eare to the Hieue, you shall heare one Bée make a noyse as it were the sound of a little Bugle hoine, and when that hath done, another will answere in a moze lower note: and thus they two will crie one after another till they swarme, and this you shall heare in some old stockes sometimes befoze the first swarme, yet very seldome.

To make your swarmes come out of
a hollow tree.

Soone as your Bées are gone into y^e tree, if the tree be hollow beneath where y^e Bées went in, then you must with an Auger boze a hole about a fote and a halfe beneath them, and thrust in a peece of match, being kindled, at the hole which you bozed, and the smoake of the match will presently driue them forth where they went in: but if the tree be not hollow beneath where the Bées went in, then you must boze a hole a fote and a halfe aboue the,

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and thrust in your match where they went in, and they will forthwith come out at that hole which you bozred, and without doubt presently will settle, and not offer to goe into any hollowe tree againe after they be once diseased: if you haue no match, you may take hay, or any other thing that will smoake, and not flame: and this you may doe although they haue been in the tree foure and twentie houres, and it will bring them forth: but if they haue been in aboue two daies, they will rather be smothered then part from that which they haue gathered: as once I proued in Essex at the honourable Sir Henry Grayes, where they told me the Bees had been in the tree but thre daies, and I practising my skill, salve them lye smothered, yet would not come forth, whereas I before, at the least fortie times, in other places brought forth those which had been in hollowe trees almost foure and twentie houres, by the meanes aforesayd. And this (though it be seldome seene that Bees will take into hollo w trees) I am sure will bring them forth, so that you may take them in as good sort as if they had not gone in at all.

To know whether your Bees
will liue or dye.

ABout Bartholome wtide you must poyse euery stocke betwene your hands, and so many as to your iudgement weigh aboue thre and twentie pounds, you may be sure will liue all that winter following, and with such ordering as is hereafter set downe, swarme the next Sommer: mary if they weigh but two pound lesse, they will very hardly escape: for you must note that if they should weigh not past one and twentie pound, there will fye pound at least be in the hieue, if it were made but of cleane straw, and you must allowe for Ware and other things within the Hieue at least thre pounds waight, so that you should

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Should not haue above thirtēne pounds waight in honey, which is about five quarts, and that will suffice to keepe one stocke all the Winter and spare. But if your Hives be made of other kinde of stuffe, and not stralwe, then you must obserue whether you thinke there be in the Hive to the quantitie of five quarts of honey or no: if yea, it is enough to keepe them: if no, the best is at that time when you poise them, presently to kill them and take that which they haue, then to let them alone and feede them, and in the end to haue them dye, and so lose your labour and all. If the hive be but a pretie little hive, then if you can imagine it to weigh but ten pound, hive and all considered, there is no doubt but they will liue without feeding: for of all things belonging to Bees, to feede them is the greatest follie.

To vse your Bees at Bartholomewtide.

When you haue poised your stockes, as aforesayd, and killed and solde so many as you thinke good, those which you meane to keepe. for increase you must vse them after this manner. First lift vp enery stocke, and sweepe cleane vnder them, then set downe your stocke againe, and be sure with clay, or sand and Cowdung tempered together, to stop them vp close round about, leauing a hole no bigger then as one Bée at once may goe in and out: for that about this time the robbers seeke about to spoyle so many as they can, Sommer being past, and nothing to be got abroad, they are driuen to seeke where it is, to y great hurt of many Bees which are not holpē to preuent them: for these robbers most commonly are such Bees as were fed in the Winter before, and some other old lazie Bees which haue taken no paines all the Sommer; but as the prouerbe is, from hand to mouth, now they seeke y spoyle of others: therfore, as I haue said, y hole being no bigger, their entrance is hindered, for then one true Bée within

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will keepe out an hundred theefe Bees without: for robbers will not enter by one at once, nor meddle with that Hieve where they can haue no easier passage, but their delight is to goe to an open Hieve, or to a Hieve where the hole is somewhat bigge, where there must be eight or nine Bees at the least to keepe it; to such a Hieve or stock the robbers will come a dozen together, and so with shuffling and striving together, many of them get in: for although one Bee of one Hieve cannot abide another of the next to come into his, yet these robbers, though being of sundrie Hieves, will ioyne altogether when they goe a spoiling, and so continue all day, and at night goe home to their owne Hieves, till the next day, yea and sometime with their strength they force the true Bees to forsake their Hieves, and yeld it to them, which though the true Bees doe, yet (as I haue sayd) the robbers will not tarrie in it all night, which is the cause that sometime you shall finde the Hieve halfe full of Honey and Ware, and not a Bee to keepe it. But by this ordering (as aforesayd) you shall preserve your owne Bees, and force the robbers to starue, as well they doe deserue: for that he which will not labour is not worthe to eate.

To make a couering for
your Bees.

This must be done vpon a raynie day when the Bees are all within, then you must stop them vp close and round while the couer is a making, thrusting in a little hollow quill to giue them ayre, but not to let them come forth, for troubling both them and you: for so long as they are stopped in, you may doe what you will without. Now, for the making of these couerings, there is one common fault, especially in the Woodland countries, where they set their Bees high, and make their couerings of boards, which in trueth is a double fault, besides the great

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great hurt the Bées sustaine by leauing the Hives so naked: for they vse to make and lay their boards like a penthouse ouer the Hives, and so let them stand. The discommoditie is this: first, the winde keepeth a great noyse amongst the boards, which keepeth the Bées waking: what hurt that is, I haue befoze shewed. Next, the standing of the Hives too high, I haue told you befoze what harme the winde doth them. Lastly, the leauing of the Hives so naked, is worst of all, either for Sommer or Winter: which carelesnes is a chiefe cause why this countrey hath so few Bées: my reason is this, (the Hieve being so naked) in winter the colde hath such power ouer the Bées, that it doth chill and numbe them so, that many of them will fall out of their Combes and dye vnder their Hives, (as by remouing in the Spring you shall finde) notwithstanding they haue foode enough, and yet the cold in this countrey would not so much hurt Bées in Winter, if the Sommer were not so hot: for if the Sommer were more cooler, the Winter cold would hurt them no more here, then it doth in Moscouia, which is farre more colder then these countries, and yet there are more Bées by an hundred parts, to their no small gaines, by reason of their good vsage. And in Sommer y nakednes of the Hives is much hurtfull to the Bées, for the hot Sunne shining vpon the bare Hives, maketh the Combes so soft within, that the Bées cannot indure to worke, which maketh them lye forth without side of the Hieve, and that is the chieffest cause why they are so long befoze they swarme. Therefore the best couering is to take sand and Colwdung, or clay with Colwdung tempered together, and horsedung tempered with clay or sand is not amisse, but amongst all you must put a good deale of short straw, and so make it into morter, then take Wheate, Barley, or Rye straw, and lay a good deale of it vpon the Hieve, and after that a great deale of the morter which you made, and then fa-

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then it on so hard as you can with a trewell, and so let it stande, then with a paire of Taylors sheeres, or other sheeres, cut away those straws which hang too low round about the hie, and when the mortar is drie, you may take it off and set it on againe as oft as you will, and it will not breake. And this, as I haue proued, is the best kind of couering for Bees, both for warmenes in Winter and temperature in Sommer, and lesse charges and sooner done then any other: for I haue made my selfe and one man eleuen of these in an houre and a halfe, and one of them hath serued two yeares: for if you haue kind Bees you may keepe one stocke foure or fve yeares, as my father hath done, of such as he conceiued a good liking vnto, and they haue done very well.

To vse your Bees in
the Spring.

About the xxi. of March, or sooner by thre or foure dates, if you think good, (but alwaies prouided it must be of a raynie or cold day, for then the Bees will lye vp on the top of the hie) you must lift euery stocke vp, & sweepe all that filth vnder the hives away, and scrape cleane the board or stone whereon they stand with a knife or trewell, but while you are a doing of it, you may set the stock vpon some other board or stone till it be done, and when it is done, you may set the stocke in his place againe: and this is it they call remouing of Bees, and so to doe you shall finde it better then to carrie them to a newe ground, as some fancie: but in any wise be sure to stop them vp againe close as they were before: for after you haue stopped them vp at Bartholome wtide, as I haue said before, you must let them stand stopped all the Winter with a little hole, according as I haue directed you, and so you must let them stand till it be mid Aprill, and then you may open

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open them as wide as you will till Bartholomewtide againe: for if you should open them on the sudden in the Spring, they may be endangered by robbers, or els of other Bees, which although are no common robbers, yet hauing spent all their foode in winter, will aduenture so more, if they may easily come by it where it is, and therefore to keepe them stopped till mid Aprill is best, for then they are out of danger of robbers, for that there is foode enough to be gotten abroad. And for the swæping away of the filth from vnder them is a speciall thing to be done: for if that filth should be let alone all the Sommer, the sweate of the Bees would fall vpon it, which would breed such a loathsome stench in the hieue, that it would make the Bees lothe to be within it, but rather lye hanging without side, and yet they will not labour abroad though they take no pleasure to be without, so vnwilling they are to take paines where they haue no comfort, and then when cold weather commeth, either they fall to robbing, or els are forced to starue: for in mine opinion that man which hath a smoaking house and a brawling wife, though he haue no ioy to be at home, yet he can haue but small pleasure abroad, and therefore good vsage helpeth all. And note this, that the chiefeest safegard of Bees consisteth in these two times looking to them, v. Bartholomewtide, and the Spring: for I haue knowne some folkes, which are yet living to testifie it, that to their iudgements and mine, they haue had stockes at Bartholomewtide, which haue wayed at least sixtēne pounds waight more then mine haue done: wherfore they haue been out of all doubt (as they thought) of their securitie, yet by following of their owne mindes, their Bees haue miscaried and dyed before the next Spring after, for want of foode, and mine haue liued and haue had foode enough and done well, and this was all thzough good and bad ordering.

Thus

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Thus hast thou (gentle Reader) in brieft, the effects (whercof) if thou put in practise, shal turne thee to a large benefite, alwaies provided that thou haue care in performing that which to thee belongeth: and one thing especially I am to put thee in minde of, that is, to pay thy tythes of thy profites in Waxes truely, although in most places they hold they are not tythable, because they cannot be tolde. And indeede I thinke Waxes will hardly be profitable to the Parson, if he should haue but the tenth Wax: but the tenth part of the money which thou takest for sale of Waxes, and the tenth part of the Honey and Ware which thou takest thy selfe, in conscience is due to the Parson: and this if thou pay truely, will accordingly be accepted. Yet I remember once there was a Gentleman, a very friend of mine, which had good store of Waxes, vnto whom the Parson (who yet liueth, and I feare is one of Martin Malaperts house) came and demanded tythe Waxes. Tythe Waxes (quoth the Gentleman) I neuer yet payd any, neither is it the custome in this Parish, and I am loth to be the first that shall bring it vp, and yet I am very willing to pay my due; Honey, Money and Ware you shall haue with al my heart, but Waxes cannot be told, therefore how shall I pay them. Told or told not, (quoth the Parson) or due or due not, I will haue the tenth swarme, and you were best bring them home to my house. Why, then I might deceiue you (quoth the Gentleman) and bring you a Castling, or an after-swarme for a whole swarme. Well (quoth the Parson) the Honey, Money and Ware shall make amends for that. But you can neuer haue profite of those Waxes (if they be Castlings, quoth the Gentleman) which I bring you. It is no matter for that (quoth the Parson) bring them me, I pray you. Well it shall be done (quoth the Gentleman.) It fortun'd with in two daies the Gentleman had a great swarme, the which he put into a Hiue, and towards night carried them

the ordering of Bees.

them home to the Parsons house, the Parson with his wife and familie he found at supper in a faire hall: the Gentleman saluted them, and told the Parson he had brought him some Bees. I mary (quoth the Parson) this is neighbourly done, I pray you carrie them into my garden. Nay by my troth (quoth the Gentleman) I will leave them euen here: with that he gaue the Hie a great knocke against the ground, and all the Bees fell out, some stung the Parson, some his wife, and some his childzen and familie, and out they ran as fast as they could into a chanaber, and well was he could make shift for himselfe, leauing their meate vpon the table in the hall. The Gentleman went home, carrying his emptie Hie with him. On the next morning the Bees were found in a quickset hedge by a poore man, who since hath had good profite of them, and is yet living. Within foure daies after the Gentleman was cited to appeare before the Ordinary: who when he came, demaunded why he had vsed the Parson after that maner. Why sir (quoth the Gentleman) I haue not misused him to my knowledge. No (quoth the Parson) did you not make your Bees sting me and all my folkes? Not I (quoth the Gentleman,) but you would needes haue a swarme of Bees, the which I brought you home according to your owne request, and left in your hall, and since I saue them not. I but (quoth the Ordinary) why did you not let them alone in the Hie? So I would (quoth the Gentleman) if they had been in mine owne garden. Why did you not let the Parson haue the Hie (quoth the Ordinary?) I could not spare it (quoth the Gentleman,) for I bought my Hie in the market, and I am sure, as couetous as he is, he can haue no tythe of that which I buy in the market, according to the English lawes: but I did by his Bees as he willed me, and as I haue done by all his other tythes, which I haue euer left in his hall, and so I did these, and
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yet there was no Bées ever demanded for tythes in our
Parish till now : and besides, the statute for tythes in
this case provided is on my side, but Honey, Money and
Ware he shall have with a good will. And that is not
much amisse (quoth the Ordinary:) so noting the circum-
stances of every cause, gaue sentence that both of them
should stand to their owne charges. So they were
contented, and after ward became friends,
and if they doe not well, I pray
God we may.

FINIS.

